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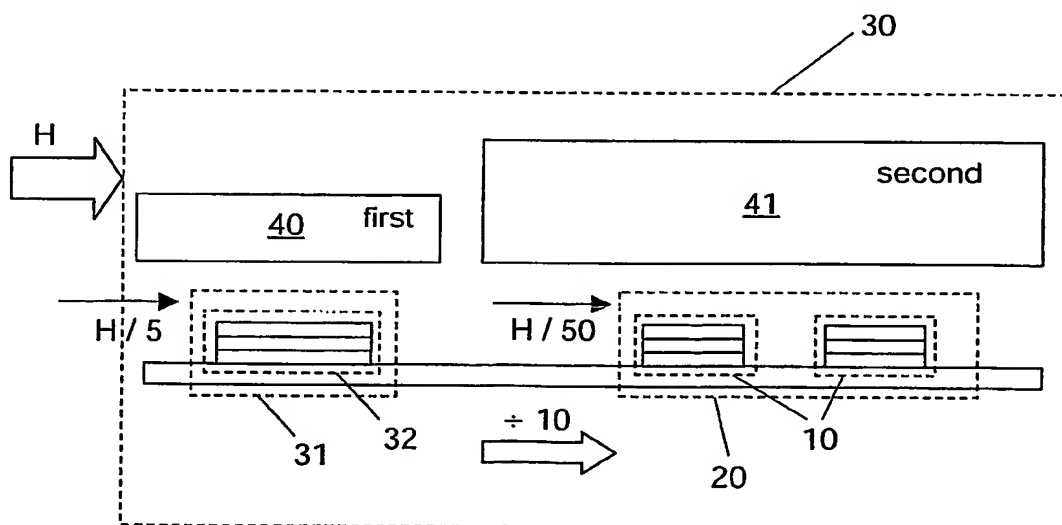
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(54) Title: **NON-HOMOGENEOUS SHIELDING OF AN MRAM CHIP WITH MAGNETIC FIELD SENSOR**



(57) Abstract: The present invention provides a magnetoresistive memory device (30) comprising an array (20) of magnetoresistive memory elements (10) and at least one magnetic field sensor element (32), wherein the magnetoresistive memory device (30) comprises a partial or non-homogeneous shielding means (40, 41) so as to shield the array (20) of magnetoresistive memory elements (10) differently from an external magnetic field than the at least one magnetic field sensor element (32). With "differently" is meant that there is a minimum shielding difference of 5%, preferably a minimum shielding difference of 10%. The present invention also provides a corresponding shielding method.

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